

the specified value of said power saving level indicator is above said predetermined threshold.

**[0025]** In one embodiment, said power saving level indicator includes (i) an indication of the discontinuous reception cycle length of the communication device and/or (ii) an indication whether the communication device is in a power saving mode as an enhancement for diverse data applications.

**[0026]** There is also hereby provided a computer program product comprising program code means which when loaded into a computer controls the computer to: include in a radio link failure report from a communication device information about the power saving state of the communication device.

**[0027]** There is also hereby provided a computer program product comprising program code means which when loaded into a computer controls the computer to: receive from an access network an instruction not to indicate the availability of information about a radio link failure for which the value of power saving level indicator is above a predetermined threshold; and in the event of a radio link failure for which the value of said power saving level indicator is above said predetermined threshold, either not log a radio link failure report, or refrain from indicating the availability of a radio link failure report to the access network.

**[0028]** There is also hereby provided a computer program product comprising program code means which when loaded into a computer controls the computer to: selectively exclude from an assessment of the performance of an access network, information about radio link failures for which the value of a power saving level indicator is above a predetermined threshold.

**[0029]** In one embodiment, a determination of a radio link failure at a communication device in a discontinuous reception connected mode is based on an estimate of the average link quality over a length of time dependent on the discontinuous reception cycle length.

**[0030]** Embodiments of the present invention are described in detail hereunder, by way of example only, with reference to the accompanying drawings, in which:

**[0031]** FIG. 1 illustrates an example of a cellular network in which embodiments of the present invention are implemented;

**[0032]** FIG. 2 illustrates an example of apparatus for use at user equipment in FIG. 1;

**[0033]** FIG. 3 illustrates an example of apparatus for use at eNodeB in FIG. 1;

**[0034]** FIG. 4 illustrates an example of operations at a radio access network and user equipment in accordance with an embodiment of the present invention; and

**[0035]** FIG. 5 illustrates an example of operations at a radio access network and user equipment in accordance with another embodiment of the present invention.

**[0036]** Embodiments of the invention are described in detail below, by way of example only, in the context of a cellular network operating in accordance with an E-UTRAN standard.

**[0037]** FIG. 1 illustrates an example of a cellular network in which embodiments of the present invention can be implemented. The cellular network includes cells 4 with transceivers at respective eNodeBs (eNBs). Only nine cells are shown in FIG. 1, but a mobile telecommunication network will typically comprise tens of thousands of cells. All eNBs 2 are connected by a wired link to an operations and maintenance (O&M) entity 12. One of the functions of the O&M entity 12

is to collect measurement results for the assessment of the performance of the cellular network.

**[0038]** FIG. 2 shows a schematic view of an example of user equipment 8 that may be used for communicating with the eNBs 2 of FIG. 1 via a wireless interface. The user equipment (UE) 8 may be used for various tasks such as making and receiving phone calls, for receiving and sending data from and to a data network and for experiencing, for example, multimedia or other content.

**[0039]** The UE 8 may be any device capable of at least sending or receiving radio signals to or from the eNBs 2 of FIG. 1. Non-limiting examples include a mobile station (MS), a portable computer provided with a wireless interface card or other wireless interface facility, personal data assistant (PDA) provided with wireless communication capabilities, or any combinations of these or the like. The UE 8 may communicate via an appropriate radio interface arrangement of the UE 8. The interface arrangement may be provided for example by means of a radio part and associated antenna arrangement. The antenna arrangement may be arranged internally or externally to the UE 8, and may include a plurality of antennas capable of operating in the kind of multi-layer transmission scheme described below.

**[0040]** The UE 8 may be provided with at least one data processing entity 203 and at least one memory or data storage entity 217 for use in tasks it is designed to perform. The data processor 213 and memory 217 may be provided on an appropriate circuit board 219 and/or in chipsets.

**[0041]** The user may control the operation of the UE 8 by means of a suitable user interface such as key pad 201, voice commands, touch sensitive screen or pad, combinations thereof or the like. A display 215, a speaker and a microphone may also be provided. Furthermore, the UE 8 may comprise appropriate connectors (either wired or wireless) to other devices and/or for connecting external accessories, for example hands-free equipment, thereto.

**[0042]** FIG. 3 shows an example of apparatus for use at the eNBs 2 of FIG. 1 and for serving the cell 4 in which UE 8 is located. The apparatus comprises a radio frequency antenna array 301 configured to receive and transmit radio frequency signals; radio frequency interface circuitry 303 configured to interface the radio frequency signals received and transmitted by the 8-antenna array 301 and the data processor 306. The radio frequency interface circuitry 303 may also be known as a transceiver. The apparatus also comprises an interface 309 via which it can send and receive information to and from one or more other network nodes. The data processor 306 is configured to process signals from the radio frequency interface circuitry 303, control the radio frequency interface circuitry 303 to generate suitable RF signals to communicate information to the UE 6 via the wireless communications link, and also to exchange information with other network nodes via the interface 309. The memory 307 is used for storing data, parameters and instructions for use by the data processor 306.

**[0043]** It would be appreciated that the apparatus shown in each of FIGS. 2 and 3 described above may comprise further elements which are not directly involved with the embodiments of the invention described hereafter.

**[0044]** Reports of information about radio link failures at UEs 8 is used to assess the performance of the cellular network. The information may include, for example, information about results of measurements at UE 8 of the radio environment of UE 8 at the time a radio link failure (RLF) is